WSDOT Ferries Division

Draft Long Range Plan

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Introduction

Where we are

- Completed and released a Draft Long Range Plan on December 19, 2008
- Scheduled public hearings for January
- Will incorporate feedback into a Final Long Range Plan in late January

Purpose of this presentation

- Review the proposed elements of the Draft Long-Range Plan
- Discuss proposed adaptive management strategies and the potential form of a WSF/WSTC joint recommendation

Purpose and Goal

The Proposed Draft Plan was designed to achieve the following key goals, as required by ESHB 2358:

- Maximize the use of existing capacity
- Apply adaptive management practices
- Deliver the highest quality service at the lowest possible cost

Further to these goals, the Draft Long Range Plan provide the information to support resolution of three key strategic issues:

- Gain consensus about which strategies should form the basis of future ferry operations
- Choose a vessel procurement strategy which will define the timing, number and size of future vessel acquisitions
- Secure a long-term capital funding commitment to allow for effective planning and delivery of capital facilities

Challenges Facing WSF

- The key challenge ahead for WSF is the lack of a dedicated capital funding stream that is adequate to meet ongoing investment requirements
- In addition, there are several other significant challenges that have shaped the development of this Draft Plan
  - Role of fares: ferry customers have experienced significant fare increases in recent years.
  - Aging asset base: there are significant capital reinvestment needs, particularly with the fleet
  - Long lead times for capital: implementation time requires timely decision making for major capital investments (vessels and terminals)
  - Vehicle capacity constraints in peak: there are significant vehicle congestion challenges today during peak periods
  - Growth, ridership demand and service needs: there is expected to be an almost 40% increase in ridership over the next 22 years

Customers: What we have learned

- The WSTC survey was an important input to the development of the Draft Plan. Among the key survey findings:
  - **Importance of ferry service.** The general survey of Puget Sound residents found that 95% believe that ferries are important.
  - **Our ridership is changing.** There are fewer commuters and more discretionary travel today.
  - **Our riders are traveling less frequently.** Compared with previous surveys, on average, riders are traveling less frequently. There has also been a noticeable increase in telecommuting.
  - **Our riders have more flexibility.** The survey suggested that a significant portion of the ridership base has more flexibility about how and when they travel than was expected
  - **Fares are not the only factor affecting use of ferries.** The general survey suggested that fares were a relatively small factor in decisions about the use of ferry services.

Changing our Business

The Draft Long Range Plan was built around several important proposed changes in how Ferries does business. These are all directly related to ESHB 2358's requirement to manage demand and operate as efficiently as possible.

•Cost containment: implementation of JTC recommendations to date and ongoing evaluations of how to be more cost effective

•Reservations to spread peak demand and offer high quality services with smallest practical terminal holding areas

•Transit enhancements to focus on growing the walk-on utilization

•Pricing strategies to encourage mode shifts and generate revenue required by Legislative budget direction

•Vehicle level-of-service standards refocused on overall service utilization measure and away from a peak commute orientation

ESHB 2358 calls for a WSF/WSTC joint recommendation regarding the proposed adaptive management strategies

The Draft Long Range Plan

- Given the current economic conditions, and pressing transportation needs statewide, it is necessary to consider the implications of funding constraints on the future of WSF.
- As a result, the Plan offers two distinct visions of the future for WSF:
  - **Plan A.** This option continues current service levels and assumes that the State will continue in its current role as owner, operator, and principal funder of ferry services in the Puget Sound region.
  - **Plan B.** This option proposes an alternative where the State takes responsibility for the core marine highway system and a locally-funded entity or entities would take responsibility for a new marine transit system.

The Draft Plan: Common Elements to Both Plan Options

Adaptive management strategies

•Reservations: majority of vessel reserved during peak periods to allow smallest possible terminals

•Transit enhancements: invest to maximize walk-on utilization

•Pricing strategies: (1) increase spread between passenger fares and vehicle fares by growing passenger fares at half the rate of vehicle fares; and (2) no fee for reservations

•Fuel conservation: continue to optimize fuel consumption by strategically slowing down vessels during lower demand periods

Fare policies

•Use Legislative planning assumptions, average annual fare increase of 2.5% (2.8% vehicles & 1.4% passengers)

•Add fuel surcharge when fuel costs exceed “base fuel costs” which are tied to a “base price” of fuel (planning assumption: $2.15 per gallon)

Summary of Plan Options

Plan A

Service Program

Maintain service at existing levels except:

- Restore 2-boat service at Pt Townsend-Keystone (22 weeks)
- Strategically slow vessels to optimize fuel consumption
- Marginal capacity increases due to new vessel procurements on:
  - Anacortes-San Juan Islands
  - Mukilteo-Clinton
  - Seattle-Bremerton
  - Fauntleroy-Vashon-Southworth
  - Point Defiance-Tahlequah

Implement operational and pricing strategies

- Reservation system for vehicles at no extra fee
- Transit enhancements to promote walk-ons
- Increase passenger fares at half the rate of vehicle fares

Capital Program

Preserve and maintain existing terminals and vessels
Purchase 10 new vessels to replace retired and retiring vessels
Invest in a new reservation system
Make transit supportive investments at selected terminals
Invest in selected terminals to maintain service frequency/reliability

Locally Provided Ferry Services

King County Ferry District

- Vashon POF continues

Plan B

Service Program

State System, same as Plan A except:

- Close Anacortes-Sidney in September 2009
- Reduced San Juan Domestic service when Sidney boat removed
- Keep Port Townsend-Keystone at one boat year-round
- Downsize Point Defiance-Tahlequah (Hiyu) ('09-11)
- Reduce Bremerton to one boat year-round ('11-'13)
- Eliminate night service on Bremerton and Edmonds ('11-'13)
- Reduce Vashon-Southworth-Fauntleroy to two boats ('11-'13)
- Eliminate Mukilteo extra summer weekend service (starting 2

Capital Program

State System, same as Plan A except:

- Purchase 5 new vessels (5 fewer)
- Eliminate terminal improvements targeting loading and unloadi

Locally Provided Ferry Services

King County Ferry District

- Increase Vashon POF to 2 or 3 vessel service

Kitsap County provider

- Seattle-Bremerton POF -- 2 or 3 vessel service
- Seattle-Southworth POF -- 2 or 3 vessel service
- Seattle-Kingston POF -- 2 or 3 vessel service

Vessel Procurement Plans

- The biggest difference in the two Plan Options is in the fleet size needed to support the operating program – Plan A fleet size is 22 vessels and Plan B is 17 vessels
- Given the schedule of vessel retirements, this translates into a significant difference in vessel procurement needs
- Plan A would require 10 new vessels, while Plan B would require only 5
- Both would refurbish the Hyak to extend its life
- Plan B has fewer weeks of emergency backup

Year	Vessel	Notes
		PLAN A
2010	Island Home #1	Replace a Steel Electric (Port Townsend)
2011	Island Home #2	Replace a Steel Electric (Port Townsend)
2011	Hyak reinvestment	Invest in the Hyak to extend life 20 years
2012	Island Home #3	Replace the Rhododendron (go to Point Defiance)
2013	144-car vessel #1	Replace the Evergreen State
2015	144-car vessel #2	Restore standby/reserve capacity; Hyak moved to s
2017	144-car vessel #3	Replace the Tillikum
2019	144-car vessel #4	Replace the Klahowya
2021	144-car vessel #5	Replace the Elwha
2023	144-car vessel #6	Replace the Kaleetan
2025	144-car vessel #7	Replace the Yakima
		PLAN B
2010	Island Home #1	Replace a Steel Electric (Port Townsend)
2011	Hyak reinvestment	Invest in the Hyak to extend life 20 years
2021	Small Vessel #1	Replace the Elwha
2023	Small Vessel #2	Replace the Hiyu
2025	144-car vessel #1	Replace the Kaleetan
2027	144-car vessel #2	Replace the Yakima

Vessel Deployment Plans

- The vessel deployment plans would vary in both number of vessels and the size of vessels depending on the fleet availability in each Plan Option
- Plan A includes both more vessels and a larger average vessel capacity

Route	# of Vessels	Fall, Winter, Spring	Shoulder	Summer
		Proposed Fleet Deployment Plan: Plan A		
Bainbridge	2	2 Jumbo		
Bremerton	2	2 Large		1 Large 1 Jumbo
Clinton	2	1 Large 1 Medium		2 Large
Kingston	2	2 Jumbo		
Point Defiance	1	1Small		
Port Townsend	1 or 2	1 Small	2 Small	
San Juans & Sidney	3 or 4	2 Large 1 Med. (Sidney ex. Winter)		3 Large 1 Med
Interisland	1	1 Sm. (winter)	1 Mid-Size	
F-V-S Triangle	3	3 Medium		
Total Deployed		17	18	19

Route	# of Vessels	Fall, Winter, Spring	Shoulder	Summer
		Proposed Fleet Deployment Plan: Plan B		
Bainbridge	2	2 Jumbo		
Bremerton	1	1 Medium		1 Jumbo
Clinton	2	2 Medium		
Kingston	2	2 Jumbo		
Point Defiance	1	1Small		
Port Townsend	1	1 Small		
San Juan Islands	2 or 3	2 Large	3 Large	
Interisland	1	1 Small		1 Mid-Size
F-V-S Triangle	2	1 Medium 1 Mid-Size		2 Medium
Total Deployed		14	14	15

Vessel class	Vehicle capacity
Jumbo	188-202
Large	144
Medium	124
Mid-Size	87-90
Small	34-64

Funding for Operations

- Operations can be funded through existing taxes and fare revenues for both plan options
- Smaller program under Plan B, would potentially free up current dedicated operating taxes to help fund capital needs

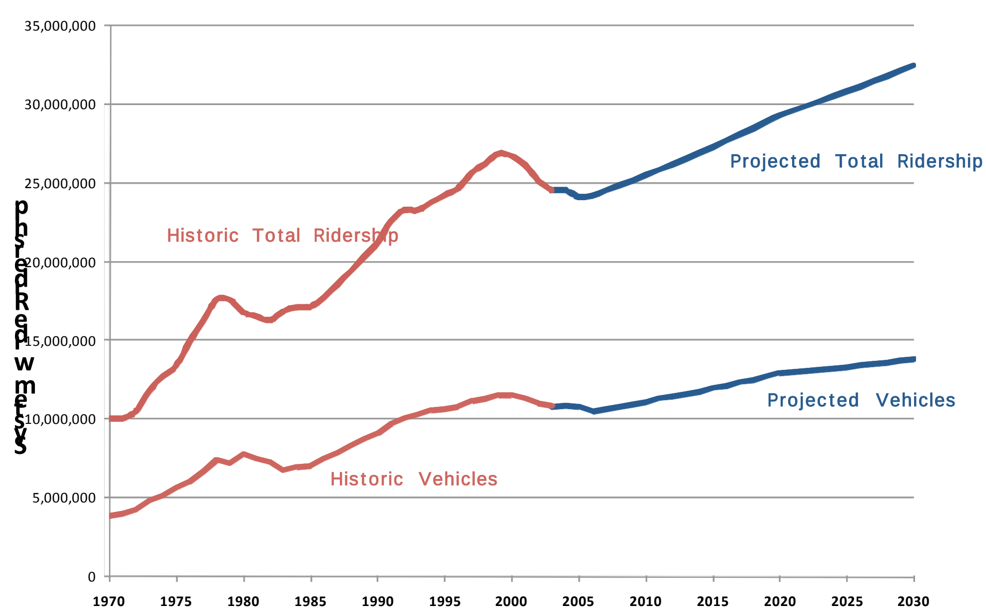
	Plan A		Plan B	
	22-Year	16-Year	22-Year	16-Year
Operating Revenue:				
Farebox Revenue	$5,516	$3,572	$5,122	$3,329
Miscellaneous Revenue (Concessions, etc)	$122	$80	$122	$80
Total Revenue from Operations	**$5,638**	**$3,652**	**$5,243**	**$3,409**
Operating Program Costs:				
Total Vessel Costs	$4,364	$2,922	$3,614	$2,450
Terminal Costs	$1,036	$684	$933	$619
Management & Support Costs	$1,066	$704	$874	$584
Total operating program	**$6,466**	**$4,310**	**$5,421**	**$3,654**
Operating revenue as % of Ferries Division costs	*87%*	*85%*	*97%*	*93%*
Net operating income/(subsidy required)	**($828)**	**($658)**	**($178)**	**($245)**
Dedicated Ferry Taxes (Operating Account)	**$809**	**$561**	**$809**	**$561**
Admin. Transfers (Motor Vehicle and Multimodal Accounts)	**$88**	**$88**	**$88**	**$88**
Total Subsidy Available	**$897**	**$649**	**$897**	**$649**
Net after dedicated taxes/(additional subsidy required)	**$68**	**($9)**	**$719**	**$404**
Average per biennium	$6	($1)	$65	$51

Ridership Risk in Operations Funding

There is considerable risk in the assumed growth in ridership

- Base ridership forecast assumes approximately 37% increase in ridership over the next 22 years
- Economic conditions and the impact of higher fuel costs are affecting both the frequency of travel and the location decisions of businesses and households
- If baseline ridership is lower, then demand pressure to improve services levels will be reduced
- Also, lower ridership would mean lower fare revenues, which would increase the operating funding gap
- WSF has not yet seen substantial ridership growth since the peak in 1999

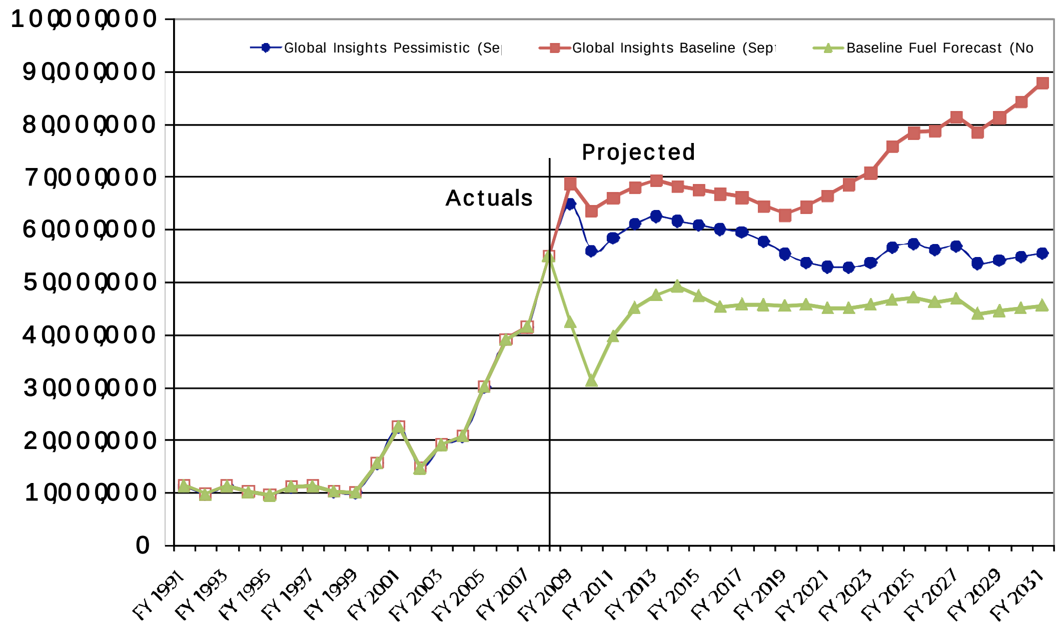
Baseline Ridership Forecasts



Fuel Cost Risks and Implications

- As demonstrated in the past several years, fuel prices carry significant financial risks for WSF
- The introduction of a fuel surcharge, will mitigate this risk from a funding perspective, but shift the risk to customers
- If the fuel surcharge is fully implemented then operational funding will not be significantly affected by fuel prices
- However, large and rapid fuel price changes would create impacts on customers as fares would need to adjust

Comparison of WSF Fuel Costs Using Recent Fuel Forecasts



Funding for Capital Program

- Current capital funding is not sufficient to address either Plan Option (includes assumed transfers in the 2008 Legislative Financial Plan
- Most significant difference in capital needs for Plan Options are related to vessels, particularly new vessel construction

	Plan A		Plan B	
	22-Year	16-Year	22-Year	16-Year
USES OF FUNDS				
Terminals Preservation	$1,412	$1,001	$1,412	$1,001
Vessel Preservation	$1,543	$990	$1,223	$820
New Vessel Construction	$1,793	$1,517	$748	$231
Terminal & Vessel Improvements	$613	$525	$526	$437
Existing Debt Service	$212	$212	$212	$212
Miscellaneous Uses	$544	$366	$544	$366
Total core capital program	**$6,118**	**$4,611**	**$4,665**	**$3,068**
SOURCES OF FUNDS				
Dedicated tax distributions to Ferries	$829	$685	$829	$685
Admin. Transfers (Motor Vehicle and Multimodal Accounts)	$1,126	$736	$1,126	$736
Federal Funds	$347	$259	$347	$259
Bond Proceeds	$241	$241	$241	$241
Total Sources	**$2,543**	**$1,921**	**$2,543**	**$1,921**
Capital Funding Gap	**($3,575)**	**($2,690)**	**($2,121)**	**($1,147)**
Average per biennium	($325)	($336)	($193)	($143)
Operating tax surplus/(additional subsidy)	$68	($9)	$719	$404
Overall Funding Gap	**($3,507)**	**($2,699)**	**($1,403)**	**($742)**
Average per biennium	($319)	($337)	($128)	($93)

Addressing Capital Funding Needs

- Both Plan Options currently show a capital funding gap
- WSTC Funding Study is identifying potential funding opportunities to address long-term ferry capital funding needs
- Further service reductions (beyond those in Plan B) would likely require closing some domestic routes

Next Steps:

- Public hearings scheduled in early January to solicit feedback on Draft Plan options at the following locations:
  - Port Townsend
  - Whidbey Island
  - Vashon
  - Bremerton
  - Southworth
  - Bainbridge
  - Kingston
  - San Juan Islands
  - Anacortes
  - Fauntleroy
- Incorporate feedback from customers, stakeholders and policy makers into a Final Long Range Plan
- Final Plan delivered to Legislature at the end of January

Proposed
Adaptive Management Strategies

Overview

ESHB 2358 requires that Ferries pursue operational and pricing strategies as a way to manage demand before adding capacity to meet future system needs.

•In June, Ferries shared over 90 individual operating and pricing strategy concepts with stakeholders and the public at FAC meetings.

•In September, after incorporating feedback and conducting further analysis, a shortlist of key potential strategies were presented:

- Transit enhancements to improve walk-on utilization
- Reservations for vehicles to level demand and reduce community impacts from queuing
- Pricing strategies to manage demand

•The Draft Plan was constructed based on these key proposed strategies

ESHB 2358 also calls for WSF and WSTC to make a joint recommendation regarding proposed adaptive management strategies

Operating Strategies: Reservations

Reservations are necessary to meet future needs

A reservation system would allow Ferries to operate with the smallest possible terminal facilities and maintain a high level-of-service

The reservation system would be the primary tool to manage demand and would also minimize traffic and queuing impacts in ferry communities

- Majority of vehicle capacity is reserved during peak periods (up to 90%).
- Policies that recognize and balance the unique travel characteristics and ridership mix at the route-level – portions of each sailing can be targeted to particular customer types (i.e. commuters, recreational users, etc…).
- Limited number of standby spaces – once standby space is full, no more traffic accepted at the terminal.

With reservations, holding areas can be sized to a single boat load plus approximately 10% for standby space

Operating Strategies: Reservations

Preliminary implementation schedule

Continue with current reservations at Port Townsend-Keystone and International Route with some minor adjustments

Propose key milestones in the development and deployment of a new reservations system:

- 2009-11: Design system and determine terminal modifications
- 2011-2013: Terminal modifications and weekend-only rollout at Clinton-Mukilteo and Edmonds-Kingston
- 2013-2015: Terminal modifications and weekend-only rollout in San Juan Islands, extend Clinton-Mukilteo and Edmonds-Kingston to full time
- 2015-2017: Terminal modifications and weekend-only rollout at Vashon, Southworth, Bainbridge and Bremerton, extend San Juan Islands to full time
- 2017-2019: Extend Vashon, Southworth, Bainbridge and Bremerton to full time

A key objective is to build customer satisfaction by rolling out the program gradually and ramp up to full deployment (90% reservations in peak)

Operating Strategies: Transit Enhancements

Transit enhancements are a key element of the Draft Plan

The availability of transit is a key factor in why customers are not shifting from driving to walking on the ferry during commute periods

To maximize the use of the passenger cabin space during peak periods, Ferries should strategically invest in its own facilities and work with its transit partners to provide:

Transit Service	Facility Needs	Non-Motorized Facilities
• Downtown Seattle shuttle • Better park & ride connectors • More frequent service during peak • More night and midday service • New routes and better connections • Better timing with vessel arrivals and departures • Hold buses until boat arrives	• Overhead loading, new or improved • Covered walkways • Sheltered bus stops • Improved pedestrian crossings • Preferential access for buses • More park & ride locations away from terminal • Improved wayfinding through terminal	• Covered and secure bike storage at terminal • Car sharing locations at ferry terminals • Trails and dedicated pedestrian and bike paths to connect with terminals

Items in red represent items where Ferries would have lead responsibility

Operating Strategies: Fuel Conservation

Managing fuel costs is a key to maximizing operating efficiencies

- While Ferries has already begun to implement fuel conservation measures, fuel price forecasts suggest an more aggressive approach
- Fuel consumption is very sensitive to vessel speed – a small reduction in speed can result in significant improvements in fuel efficiency
- The Draft Long Range Plan recommends reducing fuel consumption by slowing vessels as follows:
  - During the Fall & Spring seasons, reduce cruising speeds by 0.5 knot on average
  - During the Winter season, reduce cruising speeds by 1 knot on average
- Target the slower sailings to the times of day when demand is lower
- The changes will result in fewer daily sailings, as total crossing times will increase marginally, though these would be in lower demand periods
- Ferries is reviewing the costs and benefits of implementing additional measures such as in-dock vessel positive restraints. These are not captured in the Draft Plan

Operating Strategies: Other

Over 90 individual operating strategies identified, evaluated and most of them were determined to be potentially beneficial, either to manage demand or increase operating efficiencies

What happens to strategies not explicitly included in the Draft Long Range Plan?

•The Draft Plan focuses the key strategies which are expected to have a significant impact on either the financial outlook or demand management goals

•Many of the other strategies would individually have smaller impacts, but cumulatively could be meaningful

•Thus, it is proposed that all strategies identified as likely to be effective be included on a list of recommended strategies for possible future deployment should conditions warrant and be part of the WSF/WSTC joint recommendation to the Legislature

Pricing Strategies

The proposed pricing strategies that were included as base assumptions in the Draft Long Range Plan include:

- A 2.5% average annual fare increase (2.8% increases for vehicles, 1.4% for passengers to increase spread over time)
- Implement an automatic fuel surcharge to the fare structure
- No fees for reservations

Other pricing strategies identified that have demand management benefits which could be pursued with the WSTC in the near term:

- Small car discount
- Three-tiered seasonal pricing

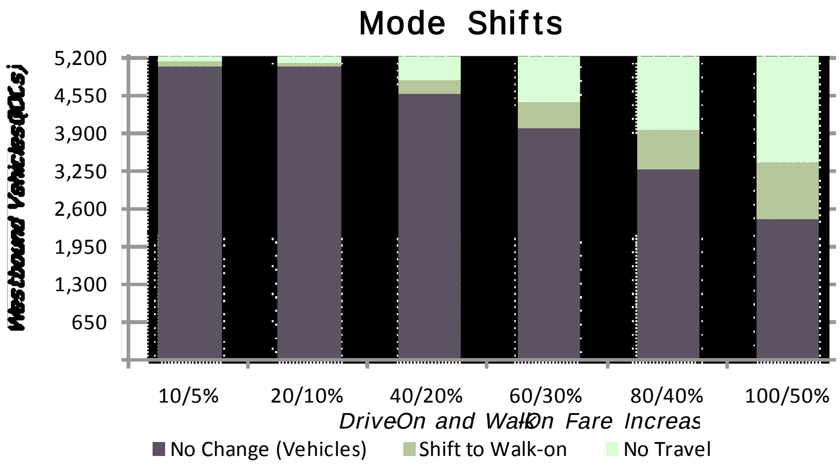
Other effective adaptive management pricing strategies identified in the Draft Long Range Plan, that might be considered after implementation of reservations and the demand management effects are understood

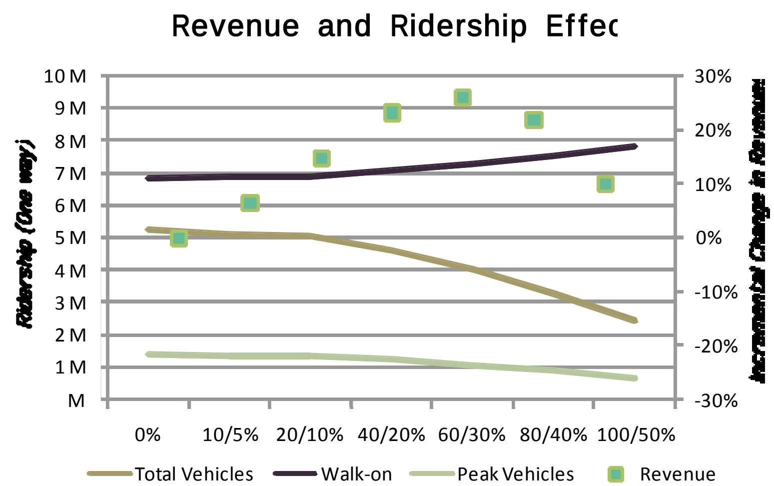
- Time-of-day pricing (peak surcharges and off-peak discounts)
- Review/modify frequent user discount policies

Pricing Strategies

Increase Passenger Fares at Half the Rate of Vehicle Fares

- Based on fare sensitivity and mode shift findings from the WSTC-commissioned survey, there are mode shift benefits to this strategy





No Fee for Reservations

- The survey showed a significant portion of customers would be willing to pay extra for a reservation. No extra charge is proposed for two reasons:
  - Ensure broad acceptance of the ferry system’s primary TDM strategy
  - Proposed reservation policies would result in most vehicles needing a reservation during peak periods

Pricing Strategies: Fuel Surcharge

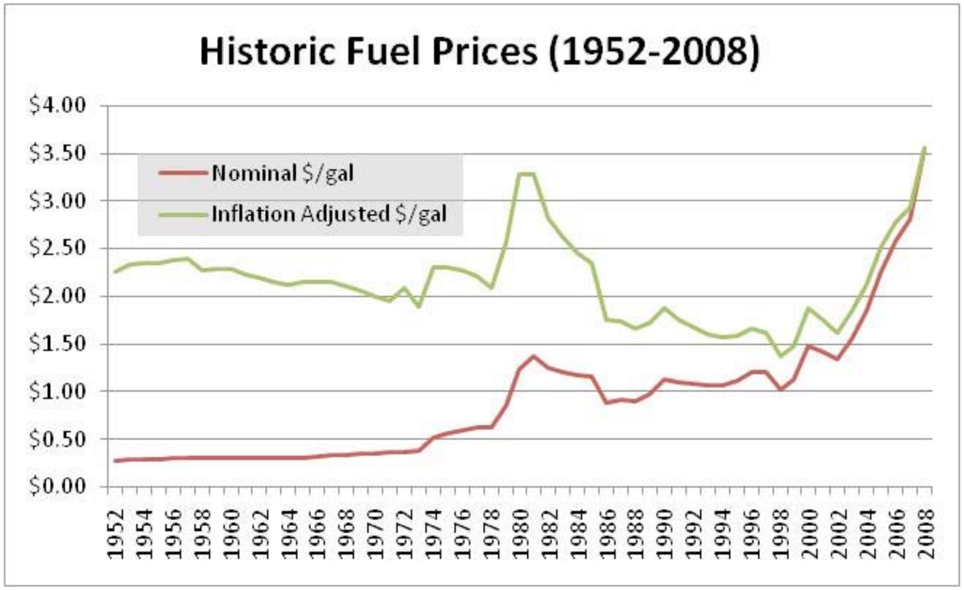
Integrate an automatic fuel surcharge into fare structure

To manage the financial risk associated with fuel costs, implement a fuel surcharge.

•The fuel surcharge would automatically adjust fares to reflect increases in fuel prices above a pre-determined base fuel price.

- A key analytical decision is how to set the "current" base fuel price from which fuel surcharges would be pegged

- Set initial fuel surcharge based on 2008$ historic fuel prices
- 1952-2008 average: $2.15



Next Steps: Joint Recommendation

- Develop a stand alone package of recommended operational and pricing strategies
- Package would integrate the following elements:
  - Final list of WSF proposed strategies, incorporating any feedback on the Draft Plan
  - WSTC Funding Study recommendations, to the degree that these might expand or modify the proposed pricing strategies list
- Bring full package to the WSTC for adoption at the February meeting
- WSF/WSTC jointly transmit the final package to the Legislature

Questions?

For more information please contact the WSDOT Ferries Division

(206) 515-3402

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